Lead Data Scientist

Description

Company Description

By 2050, the planet could be using twice as much electricity compared to today. Are you interested in contributing and helping to shape the future of the world's energy? If so, read on.

Fusion, the process that powers the Sun and Stars, is one of the most promising options for generating the cleaner, carbon-free energy that our world badly needs.

UKAEA leads the way in realizing fusion energy, partnering with industry and research for groundbreaking advancements. Our goal is to bring fusion electricity to the grid, supported by tomorrow's power stations. In pursuit of our mission, UKAEA embraces core values: Innovative, Committed, Trusted, and Collaborative."

As an employee of UKAEA you will benefit from:

- Outstanding **defined benefit pension scheme, details of which can be found at the end of this advert.**
- Corporate **bonus scheme up to 7%** and a **Relocation** allowance (if eligible).
- **Flexible working options** including family friendly policies.
- **Employee Assistance Programme** and trained Mental Health First Aiders.
- **Generous annual leave** allowance starting with 25 days, plus 3 days Christmas closure and 2.5 privilege days, in addition to UK bank holidays.
- Wide range of **career development opportunities.**
- A vibrant **culture** committed to equality and being fully **inclusive.**

The salary for this role is **£52,293 (inclusive of a Market Premium Payment (MPP))**

This role requires employees to **complete an online Baseline Personnel Security Standard (BPSS)** , including The Disclosure & Barring Service (DBS) checks for criminal convictions.

Job Description

The Role

Are you looking for an exciting opportunity to make a difference?

Join our team and contribute to the future of fusion energy. As **Lead Data Scientist**, you will play a pivotal role in the Data Solutions team at UKAEA conducts support, research, and development across diverse areas such as cloud computing, high-performance computing, algorithm development, engineering and scientific computing, artificial intelligence, machine learning, and Exascale technologies. We work at the forefront of engineering and science, ensuring fusion reactors are well understood and engineered, with our research directly informing engineering efforts. Currently, we're seeking individuals for Artificial Intelligence & Machine Learning

roles to contribute to various projects, providing software development, data analysis, and user support. You'll also engage with partners to ensure access to top facilities and assist in report preparation, actively meeting user needs.

Additional Responsibilities:

- Work in a team to support development of AI and Machine Learning tools and investigate novel approaches to improve data science capabilities for experiments on JET, MAST-U and other fusion devices.
- Exploit the convergence of AI and HPC at the Exascale.
- Support the team lead in the development of AI and Machine Learning tasks, and supervision of junior members of staff.
- Contribute to reporting results and outreach within and outside the organization.

Qualifications

Essential Requirements:

- Doctorate degree in computational, mathematical, or physical science discipline or equivalent experience.
- Demonstrable proficiency in at least one compiled language (e.g., C++, Fortran, C, Rust) or advanced scripting language (Julia, R, Swift Parallel Scripting).
- Strong experience with UNIX operating system, particularly the command line interface.
- Practical experience in agile project management and software development practices.
- Ability to effectively collaborate within diverse teams and take significant personal responsibility.

Desirable Requirements:

- Ability to travel within the UK and Europe for short periods (1-5 days).
- Actively participate in internal and external events, including presenting work and supporting users in adopting outputs.

Additional Information

A full list of our benefits can be found here https://careers.ukaea.uk/life-at-ukaea/employee-benefits/

We welcome applications from under-represented groups, particularly individuals from black and other ethnic minority backgrounds, people with disabilities, and women. Our Executive team, supported by our 'Equality, Diversity and Inclusion' (EDI) Partner and Inclusion Ambassadors, actively promotes EDI and takes steps to increase diversity within our organization. We reinforce best practices in recruitment and selection and evaluate approaches to remove barriers to success.

Please note that vacancies are generally advertised for 4 weeks but may close earlier if we receive a large number of applications.

How the process will look like

Your teammates will gather all requirements within our organization. Then, once priority has been discussed, you will decide as a team on the best solutions and architecture to meet these needs. In continuous increments and continuous

communication between the team and stakeholders, you're part of making data play
an even more important (and understood) part withing Brand New Day.

Job Benefits

GBP 52K+